



10th Annual MIS Spine Symposium

Contemporary Techniques and Emerging Technologies

Saturday, June 29, 2024

Syllabus

ESTEEMED FACULTY

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AGENDA

7 a.m. **Breakfast, Exhibits & Registration**

7:30 a.m. **Welcome & Course Overview**

Paul Park, M.D., Rod Oskouian, Jr., M.D., & Christoph Hofstetter, M.D., Ph.D.

Session 1: Unaccredited Content

7:35 a.m. **The Future VUE of MIS Surgery**

Christoph Hofstetter, M.D.

7:50 a.m. **Q & A**

7:55 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 1**

MIS TLIF with Teligen

Christoph Hofstetter, M.D.

8:15 a.m. **Q & A**

8:20 a.m. **New Drill Technology**

Victor Chang, M.D.

8:35 a.m. **Q & A**

8:40 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 2**

New Drill Technology

Victor Chang, M.D.

9 a.m. **Q & A**

9:05 a.m. **Breaks & Exhibits** (*not for CME credit*)

ACCREDITED CONTENT BEGINS

Session 2: AI & Robotics in MIS Surgery

9:35 a.m. **Radiation Reduction in MIS Spine Surgery**

Muhammad Abd-El-Barr, M.D., Ph.D.

Objectives:

- Identify the dangers of ionizing radiation as it relates to MIS spine surgery
- Describe how fluoroscopic instrument-tracking navigation can decrease radiation in MIS spine surgery
- Outline different applications of fluoroscopic instrument-tracking in MIS spine - percutaneous pedicle screw placement, entrance into Kambin's triangle and lateral interbody fusion

9:50 a.m. **Q & A**

9:55 a.m. **Robotics Facilitates Simple & Complex MIS Cases** (*virtual*)

Corinna Zygourakis, M.D.

Objectives:

- Identify MIS cases for which robotics can be used
- Describe robotic workflows to decrease the cognitive and physical load
- Describe the “Robotic Culture”

10:10 a.m. **Q & A**

- 10:15 a.m. **Navigation Trusted and Proven for MIS Cases**
Roger Härtl, M.D.
Objectives:
- Identify MIS cases for which navigation can be used
 - Describe navigation workflow
 - Describe common navigation techniques

10:30 a.m. **Q & A**

10:35 a.m. **Break & Exhibits** (*not for CME credit*)

- 10:50 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 3**
Percutaneous Screw Placement for MIS Using Fluoroscopic-Assisted Instrument Tracking
Muhammad Abd-El-Barr, M.D., Ph.D.
Objectives:
- Explain x-ray positioning in percutaneous screw placement
 - Review the navigation on Jamshidi needles
 - Describe safety precautions

11:20 a.m. **Q & A**

Session 3: Emerging Trends in MIS Fusion

- 11:25 a.m. **MIS Lateral Approaches to the TL Junction**
Paul Holman, M.D.
Objectives:
- Identify pathology amenable for this approach
 - Describe surgical maneuvers to facilitate an efficient approach

11:40 a.m. **Q & A**

- 11:45 a.m. **Extreme Lateral interbody Fusion: A Workhorse for Multilevel MIS Constructs**
Nima Alan, M.D.
Objectives:
- Identify pathology amenable for multi-level laterals
 - Describe surgical maneuvers to facilitate an efficient approach

12 p.m. **Q & A**

- 12:05 p.m. **Oblique Lateral interbody Fusion – Can Do it All?**
Neel Anand, M.D.
Objectives:
- Identify pathology amenable for oblique laterals
 - Describe surgical maneuvers to facilitate an efficient approach

12:20 p.m. **Q & A**

12:25 p.m. **Break & Pick Up Lunch** (*not for CME credit*)

- 12:40 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 4** (*working lunch*)
Tissue-Sparing Posterior Cervical Fusion
Bruce McCormack, M.D.
Objectives:
- Fusion. Outline the clinical evidence, safety and efficacy of this procedure
 - Describe tissue-sparing surgical technique, including fluoroscopic imaging and safety precautions
 - Outline patient selection, common use cases, and how to integrate this approach into your fusion practice.

1:10 p.m. **Q & A**

1:15 p.m. **ALIF the King of MIS Surgery**

Paul Holman, M.D.

Objectives:

- Identify pathology amenable for ALIF
- Describe surgical maneuvers to facilitate an efficient approach

1:30 p.m. **Q & A**

1:35 p.m. **The Gap Between MIS Spine & Providing Open Spine Surgery to Achieve Desired Outcome In Developing Country**

Soren Otieno, M.D.

Objectives:

- Describe the gap between MIS and open spine procedures in developing countries
- Describe how to improve outcomes in developing countries

1:50 p.m. **Q & A**

1:55 p.m. **Break & Exhibits** (*not for CME credit*)

2:10 p.m. **Live Demonstration Broadcast from BioSkills Lab No.5**
Retropleural/Retrodiaphragmatic Approach

Paul Holman, M.D.

Objectives:

- Demonstrate the retropleural/retrodiaphragmatic approach
- Outline the surgical maneuvers to facilitate an efficient approach

2:40 p.m. **Q & A**

2:45 p.m. **Prone (PPT) vs. LLIF**

William Taylor, M.D.

Objectives:

- Identify complications related to this approach
- Outline the indications for this approach
- Recognize the differences between lateral and prone position approaches

3 p.m. **Q & A**

3:05 p.m. **3D Navigated Lateral L5-S1 ALIF**

Paul Park, M.D.

Objectives:

- Describe techniques for incorporating 3D navigation into the lateral ALIF procedure
- Outline the advantages of utilizing navigation for lateral procedures

3:15 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 6**
Navigated Lateral OLIF

Neel Anand, M.D.

Objectives:

- Demonstrate a navigated lateral OLIF
- Outline the surgical maneuvers to facilitate an efficient approach

3:45 p.m. **Q & A**

Session 4: MIS Osteo and Neuro-Regenerative Technologies

3:50 p.m. **Disc Regeneration Techniques**

Roger Härtl, M.D.

Objectives:

- Describe the different technologies for annular closure
- Review the current literature regarding outcomes

4:05 p.m. **Q & A**

4:10 p.m. **Break & Exhibits** (*not for CME credit*)

4:20 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 7**

PTP Procedural Tips & Tricks

William Taylor, M.D.

Objectives:

- Evaluate the safety and efficacy of the PTP approach
- Optimize surgical technique and instrumentation for PTP
- Illustrate the correct anatomy

4:50 p.m. **Q & A**

4:55 p.m. **Break & Exhibits** (*not for CME credit*)

5:05 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 8**

Spinal Navigation Nuances

Roger Härtl, M.D.

Objectives:

- Describe how to ensure the accuracy of the navigation system
- Outline a safe workflow for the placement of instrumentation

5:25 p.m. **Q & A**

5:30 p.m. Adjourn

Acknowledgments

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Course Evaluation

Please take a moment to complete our online evaluation, which will be emailed to you. Your feedback helps to ensure the effectiveness of this CME activity, as well as improve future educational activities. All responses are considered anonymous. <https://www.surveymonkey.com/r/MIS2024>

If you do not receive the survey via email, please call (206) 732-6500 or email cme@seattlesciencefoundation.org.

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Identifying and Mitigating Conflicts of Interest

Purpose: The information provided addresses several requirements of the Accreditation Council for Continuing Medical Education (ACCME) to help **ensure independence** in CME activities. Everyone in a position to control the content of a CME activity must disclose **ALL** financial relationships with an ineligible company to the CME provider. This information must be disclosed to participants prior to the beginning of the activity. Also, CME providers must mitigate current conflicts of interest prior to the educational activity.

Definitions: “Financial relationships” are those whose relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit.

The ACCME defines **ineligible companies** as those whose primary business is producing marketing, selling, reselling, or distributing healthcare products used by or on patients. Among the exemptions to this definition are government organizations non healthcare-related companies and nonprofit organizations that do not advocate for an ineligible company(ies). Circumstances create a **“conflict of interest”** when an individual has an opportunity to affect the CME content about products or services of an ineligible company with which they have a financial relationship.

ACCME focuses on financial relationships with ineligible companies in the 24-month period preceding the time that the individual is being asked to assume a role controlling content of the CME activity. ACCME has not set a minimal dollar amount for relationships to be significant. Inherent in any amount is the incentive to maintain or increase the value of the relationship.

The ACCME defines **“relevant financial relationships”** as financial relationships in any amount occurring within the past 24 months that create a conflict of interest.

CME Activity Planning Committee Members: If a conflict of interest exists, the Planning Committee member must withdraw from the planning committee unless the conflict can be mitigated. Mitigation may be made by one of the following methods: (1) Peer review of CME content will be conducted at another oversight level to assure balance; (2) Change in focus of course so the activity does not include information related to products or services about which the Planning Committee has a conflict; (3) Severing relationship(s) between the member and any related ineligible company; (4) Others to be determined by the SSF CME committee.

CME Activity Planners: When a conflict of interest exists, the planning committee must address the conflict by one of the following methods: (1) Review content to be presented by speaker in advance to ensure content balance; (2) Change topic so the presentation is not related to products or services where a conflict exists; (3) Select a different presenter without any related relationships with an ineligible company; (4) Include presentations by other faculty to provide an overall balance to the content of the course; (5) Limit or specify the sources for recommendations that the presenter can use.

Each speaker is required to give a balanced, evidenced-based presentation based on published research. No conclusions or recommendations without external validation may be made by a speaker with a conflict of interest.

Disclosure Summary

July 29, 2024

The following planners and/or presenters, in the past 24 months, have/had financial relationship(s) with ineligible company(ies) whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients: (*S = Speaker; P = Planner*)

- 1. Muhammad Abd-El-Barr, M.D., Ph.D. (S): Consulting Fee:** Spineology, Spinal Elements, DePuy Synthes, Eliquence, Brainlab, TrackX; **Grant or Research Support:** NIH, Abbvie, Dana & Christopher Reeve Foundation
- 2. Nima Alan, M.D. (S): Consulting Fee:** DePuy Synthes, Stryker Globus, SeaSpine
- 3. Neel Anand, M.D. (S): Consulting Fee:** Medtronic, Spinal Balance, Viseon, Spinal Simplicity, Spinal Elements, Carlsmed, Orthofix-Seaspine, On-Point Surgical, Globus; **Stocks or stock options:** Medtronic, Globus, J&J, Viseon, SI Bone, Orthofix, Paradigm Spine, AF cell, ISTO Surgical, Bonovo, Atlas Spine, Spinal Balance, Spinal Simplicity, On-Point Surgical; **Royalties or Patent Beneficiary:** Medtronic, Globus Medical, El Sevier; **Advisory Committees:** Globus, Spinal Balance, Spinal Simplicity, Viseon, Cerapedics; **Advisor:** Gray's Anatomy
- 4. Victor Chang, M.D. (S): Consulting Fee:** Globus Medical, Bioventus, Viseon; **Grant or research support:** Blue Cross Blue Shield of Michigan
- 5. Roger Härtl, M.D. (S): Consulting Fee:** DePuy Synthes, Brainlab, Aclarion; **Royalties or Patent Beneficiary:** Zimmer Biomet (relationship has ended); **Stockholder:** Realist, Onpoint
- 6. Christoph Hofstetter, M.D., Ph.D. (P,S): Consulting Fee:** Globus Medical, Joimax, BK Medical, Kuros Bioscience; **Grant or research support:** Kuros Bioscience; **Royalties or Patent Beneficiary:** Innovasis
- 7. Paul Holman, M.D. (S): Consulting Fee:** NuVasive, SeaSpine; **Advisory Committee:** XO Biologic
- 8. Bruce McCormack, M.D. (S): Board Member & Stockholder:** Providence Medical Technologies
- 9. Rod J. Oskouian, Jr., M.D. (P): Consulting Fee:** Alphatec Spine, Globus Medical, SeaSpine, Stryker, Spineart, Medtronic, DePuy (relationship has ended), Blue Ocean Spine (relationship has ended); **Royalties or Patent Beneficiary:** Stryker, Globus Medical
- 10. Paul Park, M.D. (P,S): Consulting Fee:** Globus, NuVasvie, Accelus, DePuy Synthes, Medtronic, Lifenet (relationship ended); **Royalties or Patent Beneficiary:** Globus Medical; **Grant or research support:** SI-Bone, Cerapedics, ISSG, SMISS, DePuy Synthes
- 11. William Taylor, M.D. (S): Consulting Fee:** Atec Spine, Adcura, DePuy Synthes, Johnson & Johnson, NuVasive; **Royalties or Patent Beneficiary:** Atec Spine
- 12. Corinna Zygourakis, M.D. (S): Consulting Fee:** Stryker, 7D, Amgen; **Grant or Research:** Stryker

All the relevant financial relationships listed for these individuals have been mitigated.

The following planners and/or presenters, in the past 24 months, have/had no financial relationship with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients: (*S = Speaker; P = Planner*)

Soren Otieno, M.D. (S); Linda Sahlin, B.A. (P); Julius Gerstmeyer M.D. (P)

All planners and presenters attested that their content suggestions and/or presentation(s) will provide a balanced view of therapeutic options and will be entirely free of promotional bias. All presentations have been reviewed by a planner with no conflicts of interest to ensure that the content is evidence-based and unbiased.